Illustrated Parts & Service Map

HP 100B All-In One PC

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Key Specifications

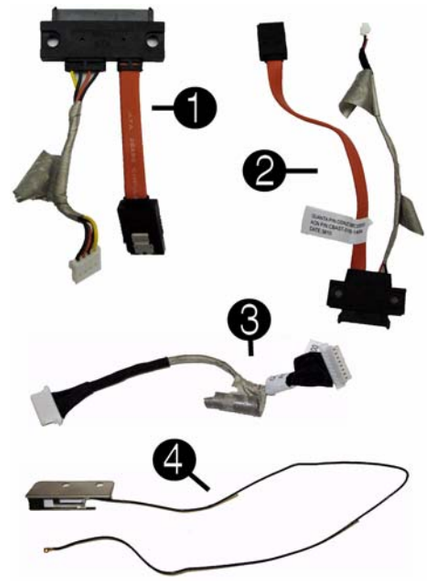
Processor Type	AMD single-core and dual-core, soldered to system board
RAM Type	DDR3-SDRAM DIMMs, PC2-10600 (1333 MHz) non-ECC
Maximum RAM Supported	4 GB (2 slots)
Power	90W PFC/90W HV External AC power adapter
Display	20-inch, non-glare, 1600x900 CCFL LCD
LAN (Wired)	10/100/1000 baseT
Wireless	802.11 b/g/n Wireless LAN (optional)
Webcam	640x480 with digital Microphone (optional)
Graphics	ATI Radeon UMA Graphics (Radeon HD 6300, DX11, UVD 3.0)
Drive Support	• (1) optical drive (DVD±RW SuperMulti DL) • (1) hard drive (750 GB, 500 GB, 250 GB)
I/O Interfaces	(6) USB ports - 2 side, 4 rear, (1) Headphone jack, (1) Line-out, (1) Microphone-in jack
Operating Systems	• Windows 7 Professional • Red Flag Linux • FreeDOS

Spare Parts

System Unit

1	Front bezel	646780-001
2	Rear cover assembly	646781-001
3	Fan assembly	646798-001
4	Stand assembly	646783-001
5	Foot, right	646784-001
*	Foot, left	646785-001
*	Display panel, 20-inch, Samsung/CMI	646794-001
*	Display panel, 20-inch, LG	646795-001

** Not shown*



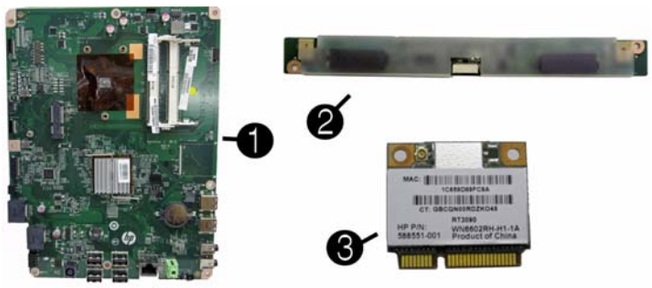
Cables

1	Hard drive cable	646789-001
2	Optical drive cable	646790-001
3	Power button board cable	646782-001
4	WLAN antenna	646806-001
*	Webcam cable	646786-001
*	LVDS cable	646787-001
*	Inverter cable	646788-001

**Not shown*

Drives (not illustrated)

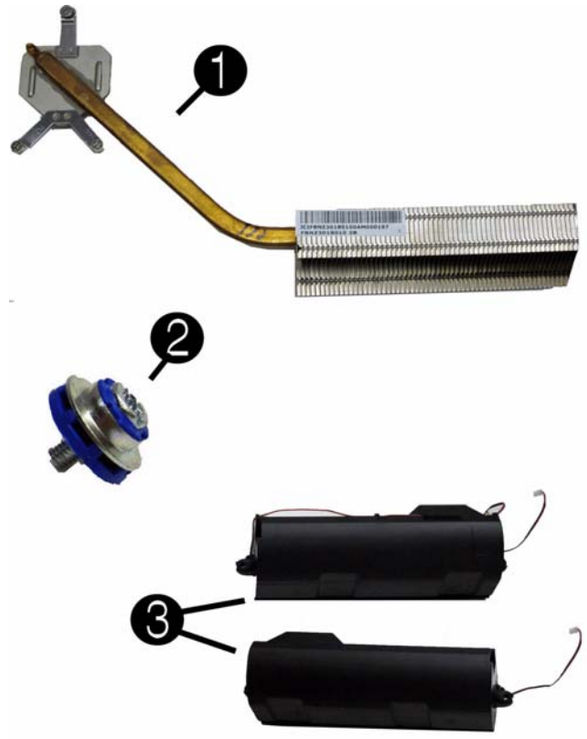
1	8X DVD±RW SuperMulti DL Drive with LightScribe with bezel	646803-001
*	8X DVD±RW SuperMulti DL Drive with LightScribe without bezel	619238-001
2	750 GB hard drive	632938-001
2	500 GB hard drive	621421-001
2	250 GB hard drive	621419-001
3	Optical drive holder	646805-001
4	Optical drive bezel	646804-001



Standard and Optional Boards

1	System board, AMD, single core (includes thermal material)	644693-001
*	System board, AMD, dual core (includes thermal material)	644692-001
2	Inverter for use with Samsung/CMI display panels	646796-001
*	Inverter for use with LG display panels	646797-001
3	WLAN module (802.11a/b/g/n)	634906-001
Memory modules (PC3-10600)		
*	1 GB	647448-001
*	2 GB	646800-001
*	4 GB	646801-001

** Not shown*



Miscellaneous Parts

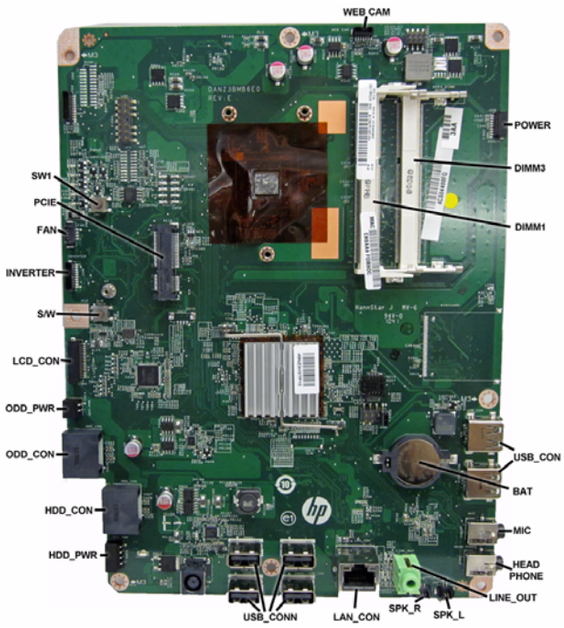
1	Heat sink (thermal module)	646799-001
2	Hard drive grommets (screws)	646791-001
3	Speaker, right	646792-001
3	Speaker, left	646793-001
*	External AC adapter, 90W, for use worldwide	646778-001
*	External AC adapter, 90W, for use in India	646779-001
*	Power cord for use in the United States	246959-001
*	Power cord for use in Brazil	490371-202
*	Power cord for use in Argentina	403811-201
*	Power cord for use in Italy	246959-061
*	Mouse, USB, optical, Portia	596410-001
*	Screw Kit	647523-001

**Not shown*

Keyboards (not illustrated)

USB keyboard for use in the United States	537924-001
USB keyboard for use in Latin America	537924-161
USB keyboard for use in Brazil	537924-201

System Board



System Board Connectors and Jumpers (component location may vary)

WEB CAM	Webcam connector	USB_CON	USB connectors (4)
POWER	Power button board connector	HDD POWER	Hard drive power connector
DIMM3	Memory socket 2	HDD_CON	Hard drive data connector
DIMM1	Memory socket 1	ODD_CON	Optical drive data connector
USB_CON	USB connectors (2)	ODD POWER	Optical drive power connector
BAT	RTC battery socket	LCD_CON	Display connector
MIC	Microphone connector	S/W	System password header
HEAD-PHONE	Headphone jack	INVERTER	Inverter board connector
LINE _OUT	Headphone jack	FAN	System fan connector
SPK_L	Speaker jack - left	PCIE	WLAN module slot
SPK_R	Speaker jack - right	SW1	CMOS password header
LAN_CON	RJ-45/LAN connector		

Common POST Error Messages

Screen Message	Probable Cause	Recommended Action
101-Option ROM Error	System ROM or expansion board option ROM checksum.	1. Verify ROM, reflash if required 2. Remove any recently added cards to see if problem remains. 3. Clear CMOS. If message disappears, may be problem with card. 4. Replace system board
103-System Board Failure	DMA or timers	1. Clear CMOS memory. 2. Remove expansion boards. 3. Replace system board.
164-Memory Size Error	Memory amount has changed since the last boot (memory added or removed).	Press the **F1** key to save the memory changes.
164-Memory Size Error	Incorrect memory configuration	1. Run Setup (F10). 2. Make sure memory module(s) installed properly. 3. If third-party memory added, test using HP-only memory. 1. Verify proper module type.
201-Memory Size Error	RSM failure	1. Ensure memory modules are correctly installed. 2. Verify proper module type. 3. Remove and replace identified faulty memory module(s). 4. If error persists after replacing modules, replace system board.
214-DIMM Configuration Warning	Populated DIMM configuration is not optimized	Rearrange the DIMMs so that each channel has the same amount of memory.
301-, 304-Keyboard error	Keyboard failure.	1. Reconnect keyboard with system turned off. 2. Check keyboard connection or keys. 3. Check connector for bent or missing pins. 4. Replace keyboard. 5. If 304, possible system board problem.
511-Display Adapter Failure	CPU Fan no Detected.	1. Reseat CPU fan. 2. Reseat fan cable. 3. Replace CPU fan.
1801-Microcode Patch Error	Processor not supported by ROM BIOS.	1. Upgrade BIOS to proper version. 2. Change the processor.
1801-Microcode Patch Error	Processor is not supported by ROM BIOS.	1. Upgrade ROM proper version. 2. Change the processor.

Computer Setup.

Heading	Option/Description
File	System Information - Lists the following main system specifications: • Product name • SKU number (some models) • Processor type/speed/stepping/ cache size • Memory size/speed/ no. channels • Integrated MAC Address • System BIOS • Chassis serial number
	About - Displays copyright notice.
	Set Time and Date - Allows you to set system time and date.
	Apply Defaults and Exit - Applies the selected default settings and clears any established passwords.
	Ignore Changes and Exit - Exits setup without applying or saving any changes.
	Save Changes and Exit - Saves changes to system configuration or default settings and exits Computer Setup.
Storage	Device Configuration - Lists all installed BIOS-controlled storage devices. • Hard Disk - size, model, firmware, serial number, connector color, SMART, emulation type • CD-ROM - model, firmware, serial number. • SATA Emulation - AHCI, IDE
	DPS Self-Test - Lets you execute self-tests on DPS-capable ATA hard drives.
	Boot Order - Allows you to specify boot order or order of attached hard drives. • Shortcut to Temporarily Override Boot Order
Security	Setup Password - Allows you to set and enable setup (Administrator) password.
	Power-On Password - Allows you to set and enable power-on password.
	Device Security (some models) - Enables/disables audio, network controllers, embedded security devices., SATA0-1, system audio, network controllers.
	USB Security - Allows you to enable/disable groups of or individual USB ports. Front USB Ports 11,13, Rear USB Ports 0,1,4,9. Accessory ports 3, 12.
	Slot Security - Allows you to enable/disable the mini card slot.
	Network Service Boot - Enables/disables boot from OS on a network server.
	System IDs - Shows product name, chassis serial number/ UUID, SKU number, family name, feature.; Allows you to set keyboard locale setting.
	DriveLock Security-Lets you assign/modify hard drive p/w for added security.
	System Security (some models) - Allows you to enable/disable: • Data Execution Prevention • Protected Audio Video Path (PAVP) (some models) • Virtualization Technology(some models) • Virtualization Technology Directed I/O (some models) • Trusted Execution Technology I/O • Embedded Security Device Support • OS management of Embedded Security Device (some models) • Button Retask Password Protection • Power Button • Consumer IR Power Button • Optical Drive Eject Button
Power	Hardware Power Management-Lets you enable/disable SATA bus power management and S5 maximum power savings.
	Thermal - Allows you to control minimum permitted fan idle speed.
Advanced	Power-On Options - Allows you to set: • POST messages - Enable/disable • After Power Loss - Off/on/previous state • POST Delay - None, 5, 10, 15, or 20 seconds
	BIOS Power-On - Allows you to set the computer to turn on at a preset time.
	Bus Options (some models) - Allows you to enable/disable PCI SERR# Generation and PCI VGA palette snooping.
	Device Options - Allows you to set: • Num Lock State at Power-On (on/off) • Multi-Processor (enable/disable) • Internal Speaker (some models) • NIC Option ROM Download (PXE, Disable, iSCSI
	Management Devices - Only displayed in the Advanced Menu when the BIOS detects multiple management options. This option is for installed NIC cards that support ASF or DASH. Use the Management Devices menu to select if the BIOS management operations will be through the embedded solution or one of the installed NIC cards.
	Management Operations - Allows you to set: • MEBx Setup Prompt (enable/disable) • Unprovision AMT on next boot • SOL Terminal Emulation Mode • SOL Local Keyboard (enable/disable)